1: Cunningham G-3 (1846-47) 1854 AJ4 W. Tibetans AJ4



the banks of the Chomoriri lake, but they are small and hard. The turnips at Lé and at Tamisgong are good and palatable.

### III.—CULTIVATION.

All cultivable land is called *Zhing*,* and this term is also generally used for a field of any kind. Good rich land is called *Zhing-zang;* stony land is called *Ri-zhing*, that is literally, "hilly land;" and meadow land is called *Thang-zhing*, that is, "plain land." All the cultivable land in Ladák lies along the courses of the small streams, and in patches on the banks of the great rivers. In the bed of the Indus especially there are large tracts of grass-land which are never brought under cultivation, but are kept solely for the grazing of cattle.

Landlords are called *Zhing-pa* and *Zhing-dag*. The poor cultivate the lands themselves, but the wealthy employ regular labourers. The *Glapa*,† or labouring man, holds the plough (*thong* or *shól*‡), while the *Glapa-mo*, or labouring woman, breaks the clods or digs the upturned earth. The women also irrigate the fields, and cut the crops. The ploughman, *Thong-pa* or *Moba*, and the diggers, *Ko-pápo* and *Kopámo*,§ are usually paid by the month (*da-phok*‖). Yáks are employed in drawing the plough, which is of wood, the share being only tipped with iron; but many of the fields are dug by the hand with a peculiarly-shaped mattock, *ko-byed*,¶ of which

* *Zhing*, arable land; *Zhing-bZang*, rich land; *Ri-Zhing*, hilly land; *Thang-Zing*, plain land.

† *Gla-pa*, a labouring woman is called *Gla-pa-mo*.

‡ *Thong* or *Shol*, or sometimes *Thong-shol*.

§ *Thong-pa* or *rMo-ba*, a ploughman. The diggers are *rKo-pa-po* and *rKo-pa-mo*.

‖ *Zla-Phogs*, pronounced *Da-Phok*, "monthly pay."

¶ *rKo-byed*, called also *Tog-tse*.

WT 772 775 688

once scourged and dismissed. No yellow Láma who has been scourged can remain a Láma.

Among the Drukpa or red sect, Lámas may be flogged without being at the same time unfrocked; they also have minor punishments, such as being obliged to cut and carry thorn bushes, or to perform other tasks of a similar nature.

WT ●311

LAND--sa (as opposed to water, or generally) zhing (cultivated land). táGHok (land temporarily cultivated), zhing-GHok or zhing stong (ownerless or waste land).

WT 423 241

LANDMARK--zhing-i theyór (or tho), as between lands of different persons. Tshiks, the strip of land left uncultivated along the edges of every field.

WT 788 648 T 788 648

LAPCHAK--lópchhak. This word means really "yearly salám" and it is used to signify the Mission, (a relic of the old days) which is sent from Leh to Lhása every third year. The old Ladák Rajas considered themselves subordinate to Lhása, certainly from a spiritual, and possibly from a temporal, point of view, and they therefore used to depute a party to Lhása, for the purpose of conveying their respectful salutations [86] to the Grand Láma, otherwise known as the Dalái Láma, or the Giálwa Rinpochey, or the Deba (Deva) Jung (Zhung). The party is always under the leadership of a man belonging to one of the noblest Ladák families; it leaves Leh about 20th September, and after halting for 3 weeks or a month at the famous Tashi Lunpo monastery, reaches Lhasa about the end of January. The party remains at Lhása for 8 months and reaches Leh about December. The post of Lapchak leader is much sought after, for not only is it a very honorable one, but it carries with it certain commercial advantages of a very lucrative description. The Lapchak leader is allowed free carriage to and from Lhása, (a distance of about 90 day's journey), for 346 horse-loads of goods. It may be imagined what a terrible tax this is, on the poor Tartars who have to provide this free carriage, for the benefit of the Lhása and Ladák Governments. The Lapchak leader takes Baltistan dried apricots, coral, silk, saffron and sugar, and brings back China tea, incense, and certain Chinese medicinal herbs, and realizes large profits on his sales both at Leh and Lhása. Before leaving Ladák,

WT 565]

WT 648 554 661 T 648 661

WT 648 439 554

585 can do so, but the fact of its not being given, does not invalidate the marriage. It is considered the correct thing to give a marriage feast, for the giving of it gratifies the vanity of the person concerned, and what is far more important, if no feast is given, the bridegroom gets no "raktak" with his bride. In most oriental countries it is customary to marry a girl, at latest, so soon as she reaches the age of puberty, but in Ladák a bride is generally as much as 16 years old before she is married. Should it turn out, as not infrequently happens, that the bride is not a virgin, the bridegroom does not take it amiss, not on philosophic grounds, but because he really deems it a matter of no importance.

595 585 Younger brothers of the bridegroom take no part in the marriage ceremony, though after the whole of the ceremonies are over, they become by right co-husbands, whether the lady likes it or not, and whether the elder brother likes it or not.

583 585 The ceremonies observed at makpa weddings are similar to those of the pakston wedding, with this difference that instead of the bride being taken away to the bridegroom's house and becoming his property, the bridegroom remains at the bride's house, and becomes her property.

583 MARRY TO--pakston cho ches, to marry in the ordinary way. Pakston tang ches, to give in marriage. Makpa khiong ches to take a "makpa" husband, and makpa chha (or khier) ches, to be taken in marriage as a "makpa" husband (for "makpa" see "Husband)."

231 [439] MASTIFF--zang-khee or cháng-khee. The zang khee is the real Tibetan mastiff, the cháng-khee is the Chángthang half-bred looking mastiff. The pure mastiffs are procurable only in Lhása; they are very handsome, but costly to purchase, and quite useless, as they very seldom become properly domesticated. They won't follow well, and they can't march or stand the slightest heat.

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● 311 MEADOW--ól-tháng ( a field of lucerne grass). There are no grass fields in Ladák, though turf is found near the edge of a stream.

264 262 MEAL--pakphey (atta), záches (food). The following are the meals eaten by a Ladáki during the day, viz., (1) chheenan taken at dawn, and consisting of satoo; with tea or milk; (2) tsáma or tsálma taken about 10 o'clock, and consisting of satoo and tea, (3) pharma taken at noon, and consisting of satoo and tea, with

think the Ladákis show much inclination to join the Moravian congregation. A Roman Catholic Mission has more recently been established here, and may possibly prove more successful, as a proselytizing agency, for apparently, there exists an extraordinary similarity between the mystical ceremonial of the Lamaistic ritual, and that of the Romish Church. Religious considerations apart, the Ladákis would do well to adhere to the faith of their forefathers, for Christian Missionaries will never agree that Christianity and polyandry can exist together, they will therefore induce their disciples to drop the practice, though on the day that polyandry ceases to be general, the sun of the country's prosperity will set for ever. Polyandry and Lamaism most effectively check the increase of population, and the consequence is that every one is fairly well off, the people are happy and crime is rare. With a non-Buddhist population, all this would be changed, the country would be rapidly overpopulated, and the people steeped in poverty, misery and crime. The three acres, a cow and a wife principle may be well enough in countries having a landed gentry to be despoiled, or vacant lands to be taken up, but for Ladák, where there is no land to be got, and no country suitable for the emigration of a surplus population, it would amount to an economic error, to encourage the introduction of any innovation, having an undeniable tendency towards the ultimate abolition of the practice of polyandry.

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MOLE--SHmeya or rmeya. Ladákis think that a mole on a woman's face is a beauty.

MONK--Láma (general,) geylong (a full monk), geytshul or tsunchhung or chhungjung (a neophyte), but see under heading "Láma."

MOP--sumba. In Ladák a mop is made by fastening on to the end of a stick, a piece of sheep skin, with the wool left on it.

MORNING--hngamo (general), ngeema tsikSHar (sun, rise) ngeema-tsalm breakfast time about(10 o'clock), ngeema ngeenggung (mid-day). For "good morning," the word "joo" is ordinarily used; but if a layman addresses a Láma, or when one Láma wishes another "good morning," the word "chhaktshal" is used.

311 UNCULTIVATED--stong (waste land); tha (land which is only temporarily uncultivated).

556 415 /165/ URN--samáwár. The Russian combination tea-pot and urn. A cylinder for holding charcoal, passes through the centre, and the tea and water are put in and boiled by means of this charcoal. These urns are much used by the well-to-do people of Ladák, especially when on a journey.

426 792 USURER--phar-zákhan. The Indian and Kashmiri traders of Leh do not do much in the way of money-lending. The people seldom borrow anything but grain, and this they usually borrow from the monasteries. The Indian bazar rates of interest prevail in Ladák. For money, one anna per rupee per mensem is the usual charge, and for grain "sowái" is paid, that is to say, for every four parts of grain borrowed, five must be repaid at the time of the next harvest.

562 292 /166/ VEIL TO--yola kap ches (general); rdongyol kap ches (the face). Tibetan ladies do not ordinarily wear veils, except in the case of the ex-Raja's wife, who is supposed, when she appears in public, to wear a veil, called "SHokSHok," which is made of silver wire and studded with pearls and turquoises.

577 779 /167/ VIRTUE--geywa. The ten chief virtues, as defined by the Buddhist scriptures, are the abstaining from (1) killing, (2) stealing, (3) fornication, (4) lying, (5) abuse, (6) idle talking; (7) calumniating, (8) avarice, (9) mischief, (10) heterodoxy.

574 554 195 VISIT TO--jal la chha ches (when the inferior goes to visit the superior); jal la yong chuk ches (to receive the visit of an inferior); thuga chha ches or thuk ches (when the visit is between equals); thuga yong chuk ches (to receive the visit of an equal).

VISIT--jalches (of an inferior to a superior); thukches (between equals).

VISITOR--jalkhan (of inferior rank); thukkhan (equal in rank to the person visited).

862 /168/ WEAN TO--peebee chat ches. Ladákis don't wean their children till they are two, or even three, years old.

564 WEAVER--thakkhan. There is no "weaver caste" in Ladák.

286 589 601 /169/ WIDOW--mórangmo. But see "Marriage," "Divorce," and "Remarriage."

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4



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The District.

101 Configuration and sub-divisions of Lâhaul.

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Lâhaul contains the head-waters of the Chenâb river, and is made up of three valleys—the valley of the Bhâga river, the valley of the Chandra, the valley of the united Chandra-Bhâga or Chenâb. There is also a tract of more than a hundred square miles of entirely uninhabited waste, which is not attached to either of these valleys, and is situated on the north side of the western Himalaya below the Bára Lácha pass; this is generally known as Lingti. The question whether this tract belonged to British India or to Ladákh was disputed, but was eventually decided in our favour. It is wholly uninhabited. The streams of this tract are tributaries of the Zánskár river which falls into the Indus; so that it will be seen that all the six great rivers of the Punjáb, except the Jhelam, draw some part of their waters from the Kángra district. The Chandra and Bhâga rivers rise on opposite side of the Bára Lácha pass, at an elevation of nearly 16,500 feet above the sea. The Bhâga flows south-west for 56 miles, with an average fall of 125 feet per mile; the Chandra, with an average fall of only 65 feet per mile, flows first to the south-east for 55 miles till it is turned by the mid-Himalaya at Shigri, and then sweeps along the base of that range to the north-west for sixty miles to Tándi, its point of junction with the Bhâga. All along this latter part of its course the mid-Himalaya hangs close over the Chandra: opposite Gondla it rises like a wall a full 11,000 feet above the river bed; such a sheer rise is to be seen in few other places in the world. From Tánd to Tirot, on the border of British and Chamba-Láhaul, the united rivers run some sixteen miles with a fall of about 80 feet per mile.

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The great triangle formed by the Chandra and Bhâga is filled up by an off-shoot from the western Himalaya joined to the main chain at the Bára Lácha pass; its peaks rise to 21, 20 and 19,000 feet, and its numerous lateral valleys are all filled with glaciers. It is described as "one great ice-bed, broken here and there by lofty heights of impassable rock and snow. To the south of the highest peak, 21,415 feet, stretches a vast glacier 12 miles in length, which is met by another of even greater dimensions." The most noted peak, though not the highest, is the Gephán Lhá, or God Gephán, in whose honour the Láhaulis hold feasts and make sacrifices. This is the peak which can be seen from the Kúlu valley through a gap in the mid-Himalaya. The most noted glacier in Láhaul is that known as the big Shigri at the bend of the Chandra on the south side. It is nearly two miles wide and runs right down to the river; within the memory of many men alive it caused a cataclysm, the marks of which are still plainly visible throughout Láhaul at a great height above the level of the river. For the first thirty miles of the course of the Bhâga and the first seventy-five miles of that of the Chandra, the country is and probably always will be entirely uninhabited; not a bush even is to be seen, but the grass, though it looks scanty and disappears at no great height above the bottom of the valley, is in most places of a kind upon which sheep and goats thrive wonderfully. In July and August therefore these wastes, and also the wastes lower down behind the villages, are visited by shepherds from Kúlu and Gaddí shepherds from Kángra. There are three small

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4





lakes in this country, two on the Bhága and one on the Chandra near the Pálamo pass. This last is much the largest, being three quarters of a mile or more long. The water in all is fresh and very clear. In this vast region of alps and ice, it will be readily understood that habitable spots and cultivated fields are few and far between. They are found only in the lower valleys of the Chandra and Bhága, the remainder of the canton being desolate and completely uninhabited, save when, for a few weeks in summer, the Kúlu shepherds bring up their flocks for pasturage. The inhabited part of the Chandra valley is called by Láhaulis Rangloi, that of the Bhága, Gárá, and that of the Chandra-Bhága, Pattan.

The scenery in Láhaul is almost oppressive from its grandeur, and it is wild and desolate, for the villages and cultivated lands are mere specks on these vast mountain slopes. But there is something pretty and smiling about the near view of the villages, especially in Pattan and the lower part of Gárá. There is nothing striking in the flat-roofed two-storeyed houses, which are massed together in one or two blocks, so as to give in-door communication in winter; but the clumps of pollard willows standing in plots of smooth green turf, and the terraced fields neatly kept and waving with thick crops of wheat or barley, are pleasant to look at. On the banks of the fields and under the small canals are the *dang* or hay fields, in which the grass grows luxuriantly, mixed with bright flowers as in an English meadow, and here and there in bush or hedge are wild roses, bright crimson or bright yellow, and wild currant or gooseberry trees. Wherever water is brought, all this verdure springs up, but without irrigation the ground is so nearly barren that not only no crop will grow, but there is so little grass that at a short distance you would think there was no green thing on it. This description, however, does not apply to the upper villages in Gárá and the greater part of Rangloi; here there are few or no trees or bushes round the villages which have a very bleak look, but the grass grows thick and green on the hills without irrigation. In a few places the slopes immediately above the villages are thinly covered with *kail* (*Pinus excelsa*) or pencil cedar (*Juniper excelsa*) and higher up, here and there, there are patches of birch wood. Near the villages on the road-sides are long dykes or walls of stone from four to five feet high and a yard or more broad, on the top of which are placed slabs or round stones, on which the *ommái pádme hún* and other Buddhist texts or *mantras* are inscribed. *Chúdhten* or *Dangten*, which are curiously-shaped conical-buildings erected in honour of some saint or incarnation or as the mausoleum or relic temple of some *lámá* or great man, are found in the same situations. Above the villages, sometimes on the hillside and often under the shade or on the very face of a precipice, are seen the *gonpas* or monasteries of the *lámás* with flags flying and whitewashed walls. The average elevation of the cultivated and inhabited portion of Láhaul is estimated by General Cunningham at over 11,000 feet. Mr. Lyall, on the other hand, puts it at something less than 10,000. The highest villages are in the lower part of the valley of the Bhága, where one, named Kangser, is mentioned by Mr. Lyall at an elevation

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans A.



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The Chandra and Bhága.

of 11,345 feet. Darcha and Khoksar, the highest villages in the upper valleys respectively of the Bhága and Chandra, are about 10,800 feet above the sea.

The source of the Chandra is in a huge snow-bed, more than 16,000 feet above the sea, on the south-east slopes of the Bára Lácha pass. From its very commencement a considerable stream, it becomes quite unfordable a mile from its source. Its course is south-east as far as the angle between the Kanzam range and the mid-Himalaya, a distance of 55 miles. Here, turned by the mountains, the river sweeps round to the north-west and skirts the base of the mid-Himalaya until it is joined by the Bhága at Tándi after a course of 115 miles. Its fall from its source to Tándi averages only 65 feet per mile. For the first 75 miles the valley of the Chandra is entirely uninhabited; the hills sweep down wild and barren to the river, and end in broken cliffs, the base of which is choked with the *débris* of decomposing rock. Above, the scene is equally desolate. Not a tree or a bush breaks the monotony of the bleak hill sides, and grass even disappears at no great height. The pasturage, however, though scanty in appearance, is of a quality much valued for sheep and goats, and is annually sought by large flocks driven up in July and August from Kúlu and even Kángra. A lake, called the Chandra Tal, near the Pálamo pass, is a favourite halting-place for the shepherds. The lake is three-quarters of a mile or more in length and of considerable width. It is fed by springs and the melting snows, and the surplus water runs by an outlet into the Chandra.

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The first signs of permanent habitations are met with opposite the Hamtá pass at old Khoksar, where there is a village occupied by five families some 14 miles above Koksar at the foot of the Rohtang pass. Here "the river enters on a less uninviting country; the valley widens considerably in several places, and there is a good deal of cultivated ground on the right bank, while on the left are a few scattered trees." As Ghondla is approached the country on the northern side still opens, and cultivation increases. The hamlets are larger, and the houses better built, and surrounded with groves of *pípal* and willow. The northern mountains too take a gentler slope; but on the south, on the other hand, they hang over the river, in precipitous masses. Opposite Ghondla a precipice rises like a wall 11,000 feet sheer above the river-bed.

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The glaciers of the hills in the interior threaten the river in more places than one. The most noted glacier is that known as the *big shigri** at the south-eastern extremity of the interior range of [illegible]. A fall of this glacier in 1836 caused a stoppage in the course of the river, and a cataclysm, the marks of which are still plainly visible throughout Láhaul at a great height above the level of the river. Captain Harcourt, who crossed the glacier in 1869, puts its width at nearly two miles; and, he adds, it "is steadily subsiding, and every year is getting lower and lower". In another passage, after alluding to the cataclysm of 1836, he says: "There can be little doubt, judging from the quantity of ice collected on the flanks

* *Shigri* is the local term for any glacier.

of the mountains that bound the river, that at any day such a disaster may again occur."

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4



# CHAPTER IV.

## PRODUCTION AND DISTRIBUTION.

### SECTION A.—AGRICULTURE AND ARBORICULTURE.

Chapter IV, A.

Agriculture and Arboriculture.

Detail of area with reference to agriculture.

The areas of cultivation in Láhaul and Spiti as ascertained at the revision of Settlement by Mr. Lyall were respectively 3,096 and 1,184 acres. A detailed statement adapted from a return printed in Mr. Lyall's report is subjoined. Commenting, however, on the figures Mr. Lyall states his opinion that the "real cultivated area (in Spiti) is about half as much again as that shown in this return." It may, therefore, be approximately given as 1,775 acres.

*Area (in acres) cultivated and barren in Láhaul and Spiti.*

| Subdivision. | Paying revenue to the State (*Khálsa*). | | Revenue alienated or remitted (*Jágir* and *máfi*). | | Total area assessed. |
|---|---|---|---|---|---|
| | Barren. | Cultivated. | Barren. | Cultivated. | |
| Láhaul ... | 1,053,713 | 1,999 | 350,807 | 1,097 | 1,407,616 |
| Spiti ... ... | 1,342,816 | 1,119 | ... | 65 | 1,344,000 |
| Total ... | 2,396,529 | 3,118 | 350,807 | 1,162 | 2,751,616 |

Crops and system of husbandry in Láhaul and Spiti.

Barley is the principal crop in both *wazíris*; a very fine description of wheat, with six tiers of grain on each ear, is also grown in Pattan in Láhaul, and from Kibbar downwards in Spiti. Major Hay puts the return on seed sown in Spiti at 14 to 1 for barley, and from 10 to 12 to 1 for wheat. Mr. Lyall's enquiries led him to think that this estimate is about right as an average. As three *khal* or *lakh* (land measure) are found to be about equal to an acre, it may be estimated that an acre produces in Spiti 42 *khal*, or 12½ maunds of barley, and 36 *khal*, or 10½ maunds of wheat; this is taking the *khal* at 12 *ser* only, which is rather less than its real capacity. In the upper villages the crops are occasionally blighted by early frosts, but on the whole the harvest must be unusually certain and invariable in amount. In Láhaul the outturn per acre must be rather less on the average, as the cloudy drizzly weather which sometimes prevails, particularly in Rangloi, must do harm. The other crops, besides wheat and barley, are peas, which are much grown in Spiti, but not in Láhaul, and buck-wheat which is common in Láhaul but very rare in Spiti. Mustard is sometimes, but rarely, grown in small quantities for oil. A little *chína* is also sown in the lowest part of Spiti.*

* An excellent account of the vegetable productions of Láhaul by Dr. Aitchison was published in Vol. X of the Linnean Society's Journal.

der of the mountain turned and waved. He was the stouthearted one who carried the dreadful load over Rothang.

Tashi (which means "good luck") was our new employee. He was short and stocky, middle-aged, pleasant, quiet, efficient. He had with him his son, about fourteen years of age. They had ten horses and were going as far as Kyelang, three stages distant. I agreed to pay eight rupees a day for each riding horse, five rupees a day for each pack horse. The horses were the small Punjab type, not even ten hands high, with small feet and fairly sturdy shoulders. We rode two; the rest carried the baggage. Tashi and his son walked.

By the time the horses were packed, I knew that I could go with Tashi in confidence to the end of the earth. He was one of those quiet, steady, competent men who show the mark of the mountains. His horses were also good. They were fast-traveling animals. The riding ponies had no bridles, only halters. The saddles, which had no stirrups, were crude wooden pack saddles, piled with sacks and blankets. Though the saddles were not painful, it was more comfortable to walk, as I did most of the way to Gundala.

The Chandra canyon, between a mile and a half mile wide, is deep and twisting, with the mountain walls going up on both sides at precipitous angles. There are here and there a few pine trees along the river and fir trees on the benches. These high benches, the day we passed, were filled with sheep and goats, white-fleeced animals that from the distance looked like great patches of flowers such as one sees in the Cascades of Washington when the squaw grass is in bloom. Now and then a bench close to the river had been planted in potatoes, millet, wheat, and a tall flowering plant that I first thought was a sunflower, called the *kuth*, which is grown for medicine. There were scatterings of yarrow, yellow violets, snapdragons, and delicate pinks along the trail; and now and then I saw whole acres of cowherbs in bloom —the tallest, most lush cowherbs I have ever seen.

12: Douglas T-3 (1951)1953 AJ4 W. Tibetans AJ4



133 This clear, cold stream runs into the Indus; and at their confluence sits the bleak village of Upshi.

The Indus rises in a Himalayan basin nearly seventeen thousand feet high. Once it was fed by numerous lakes. Now these lakes are mostly landlocked and turning to salt. The Indus is a powerful stream, cutting its way through the Ladakh range of the Himalayas. The Indus is an international waterway; it rises in Tibet, flows through northern India, traverses the length of Pakistan, and empties into the Indian Ocean near Karachi. It is cosmopolitan in character, giving its waters to a greater number [823] of races than any other stream in the world. The Indus is a legendary stream. The Tibetans call it the River of the Lion, since it is said to flow from a lion's mouth. The folklore is that those who drink the water of the Indus will be heroic like a lion. And the bed of the river is thought to be covered by sands of diamonds.

This day in August 1951, the Indus was swollen with snow water and running dark with clay. It poured through narrow channels with an angry roar and spread wide where the channel • [311] flattened out. Crude irrigation canals led off to fields of barley and corn. The valley below Upshi is several miles wide; and the land lay mostly unused, the vast potential of the Indus being largely untapped.

About five miles below Upshi is Marchelang, a village of a few hundred people—a garden in a washed and rock-strewn land. At this point the Indus Valley runs east and west. A wide canyon opens to the north, a canyon leading to Tibet and China over the 18,370-foot Chang La Pass. To the south there is a small canyon 792 or nulla. It was to that one we turned, and in a few miles came 346 to Hemis Monastery.

Many monasteries in Ladakh and Tibet are castellated buildings perched on high cliffs and thus protected from marauders and invaders. Hemis, founded about A.D. 1047, holds no such strategic position. It lies deep in a narrow nulla which is from a

13: Heber and Heber D-3 (1914-25) 1926 AJ4 W. Tibetans AJ4



short planks, and whose wooden framework may be crudely carved; this will be the summer kitchen-living-room. Its winter counterpart, a smaller, darker room, will be found on the second floor, the windows being glazed by small panes in the most advanced houses, while the others are stuffed with bundles of rags or closed in with pieces of paper, for which we often receive requests at the beginning of winter. The ground floor serves to stable the cattle, who thus provide a warm atmosphere at the base of the house in the severe winter, a mild basement heating. What we may thus term the biological warmth of winter concentration is shared also by the fowls, who arrive at night in the winter kitchen-living-room, and by this means are persuaded to lay occasionally even throughout that bitter season.

Our idea of the place for a flower garden is just outside the front door and around the house, but these people cannot spare land there, for, if the house is built on land, which can be irrigated, every bit must be used for agriculture, and any spare little plot for a few vegetables. But their appreciation of flowers is seen by the boxes full of gay blossom on roof or balcony, and the place for a "buttonhole," in the absence of our tailor-made provision, is behind the ears, giving a much more saucy effect, especially when so near to sparkling brown eyes. Not only may there be a flower garden on the roof, but it is not uncommon to see a tent pitched there for shade and summer sleeping purposes. Sleep itself is most easily invited in the knee-elbow position, clothes being removed and used to augment the bedding. In spite of this unfavourable position the Ladaki is not guiltless of snoring, but much the reverse! In our civilization the poorest will aim at being tidy outside. Not so the Ladaki. He wears his oldest dress outside, and his best one underneath, reversing the order for special occasions. Roughly sewn patches are applied at any angle; there is no need to attempt invisible mending as we do, for the more patches with the edges over-

24:Peter E-5 (1938)1963 AJ4 West Tibetans AJ4



## 2. LADAK

### a) *Preliminary Description*

I would like to begin with a brief description of Ladak and of Leh, the setting in which my research work was carried out, before accounting for the polyandry of this region.

1. *Environment*

Ladak (often spelt Ladak*h* in English, from the Hindi, whereas in Tibetan it is *La-Dwags*),[1] is really the most westerly part of the high plateau of Tibet, today included in Kashmir as a *tehsil* or administrative sub-division of that state (see Map 5). It is limited in the north by the Karakorum mountains and the Kara Tagh, which are westerly continuations of the Kwen Lun mountains of northern Tibet; in the south, by an artificial frontier drawn along the foot of the Zangskar and main Himalayan ranges; in the east, by an equally unnatural boundary with Tibet which runs from the Karatagh south-west of the Lingzi T'hang (plain) to the Pangkong Tso, and from there, south-east, to the upper Indus valley; in the west, by the other Kashmir sub-divisions of Zangskar and Baltistan.

The area covered by the sub-division is 82,000 square miles, of which only 47,762 are cultivated. It is one of the most elevated regions of the earth, the inhabited part ranging from 9,000 feet to 14,000 feet, and even more in Rupchu, as we have just seen. It is traversed from the south-east to the north-west by the Indus river, and in the north-western part another large watercourse takes its source, the Shyok river, into which runs the Nubra. It is these valleys which constitute the fertile areas where habitation is possible, agriculture fed from river and glacier water being the mainstay of the village.

As in Lahul, and even more so here, because of the altitude everywhere, the climate is a cold one for the greater part of the year, only the brilliant tropical sun of India bringing some warmth during the day in the summer months. The rainfall is scanty but, during the winter, an appreciable amount of snow does fall. Temperatures in the inhabited parts of Ladak, that is at a mean altitude of 11,000 feet, vary between a maximum of 62° and a minimum of 23°, on average.

Trade routes through Ladak are important, and there are three prin-

[1] Another Tibetan name for Ladak is *Mar-yul (dMar-yul)*, the "red country".

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deposit, the height of the apex above the plain or the main-valley bottom, is often many hundred feet. 133x

The fans frequently have become denuded, that is to say, cut up; their remains are sloping plateaus (with a slight curvature of surface) attached to the hill-sides in front of the ravines; these plateaus are commonly divided into halves by a gulley, through which the side-stream now flows at a low level, and they may end in a cliff towards the main river. The importance of these fans (whether they be whole or denuded ones) with respect to the habitation of the country consists in this, that it is chiefly, though not universally, upon them that cultivated ground occurs, the water of the side-streams being led over them for irrigation.*

To return to our route. Below Tashgām we come into a granite country; the mountains rise on both sides to a great height; not always are they seen thus lofty from the valley, but from any vantage ground above we look on to serrated ridges of 17,000 and 18,000 feet, the whole vertical height from that level down to the river, which is at little more than 9000, being of bare, irregular, broken cliffs and their débris. The sketch on the next page shows a view up a side-valley that penetrates into the mountain mass to one of the lofty ridges; its whole sides are naked, but a narrow strip of watered and cultivated ground lies in the bottom. [311]

The mountains, though at the first glance they show no trace of herbage, yet do bear a little; this is sought out by the small herds of goats that are driven to the more favourable places. Along part of this road two or three kinds of bush occurred pretty plentifully; one is the pencil cedar (*Juniperus excelsa*), which sometimes grows low and sometimes taller and tree-like; another is a bush called by the people "umbū" (a *Myricaria*); then there were currant bushes and numbers of red-rose trees, each tree being magnificently furnished with flowers, this was in the middle of June; all these were on the lower slopes among dry stones, flourishing where no grass would grow. 137

The Drās River goes on north-north-westward to join the Indus; 133x

* For details about the formation and denudation of fans in Ladākh I must again refer to the paper before mentioned, in the Quarterly Journal Geological Society, xxix. 8.

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The line of ridge is from 18,000 to 19,000 feet high. The Passes through it are 17,000 and 18,000 feet.

A valley, coming down from this great central ridge, bounded close by rocky branch-ridges, at the distance of four miles from the river widens, the spurs of the hills both becoming lower and retreating aside, insomuch that there occurs an open space of the form nearly of an equilateral triangle, the side of it five miles in length. The town of Leh is at the apex of this triangle, where the valley begins to widen. Rocky hill-spurs form the sides, the river Indus the base, Pitak being at one end of the base.

This triangular space is not a level; it has a steady, gentle slope up from the river. Advancing from Pitak we rise, in the five or six miles, about 1000 feet, the altitude of the town of Leh being 11,500 feet. The lower part of the slope (of which the whole consists of a gravelly alluvial deposit) is dry and stony, but as we go on we come within the tract that the side-stream has been able to supply with irrigating water, and find a space of several hundred acres covered with crops.

Here, by the farther edge of this cultivated space, on one of the branch spurs from the hills and spreading on to the plain in front of it, is built the town of Leh. The most conspicuous object in it is the palace of the former rulers, an edifice boldly built up to the height of eight or ten stories from the shoulder of the spur; a slight in-leaning of the massive walls gives it a great look of strength. Higher up, on the same rocky ridge, are the monastery and the towers of an old fortification. Below, in front of the palace, houses cover the slope. On the flat beneath is the newer part of the town. Entering from the direction of Kashmir we pass through a small gateway and find ourselves in a long, wide, and straight bazaar, the houses regularly built and uniformly whitewashed. This has been erected since the Dogrās took the country, and is now the place that is most frequented. At the farther end of this bazaar one passes into the old part of the town, among houses separated by narrow winding passages. As one rises on to the slope of the hill one meets with a few houses of a

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higher class; these were built by the Kahlons, or ministers of the former sovereigns, and now for the most part belong to their representatives. 361

Outside the city[1] are several gardens, or what are here so called; in truth they are plantations of willow and of poplar. These plantations are extremely useful, both for their grateful [313] shade—which is the first thing a traveller will look for in these parts in summer time—and as a reserve of building-timber, a thing in Ladākh extremely scarce. On the east of the town [311] the mountains are near and there is no cultivation; but to the west, the whole width of the valley, about three-quarters of a mile, is of cultivated land, descending in terraces, with small hamlets scattered over it.

[1] [i.e. Leh — Ans.]

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believe there is no limit at all, but of as many as this I have known instances. 595 161

In addition to this form of polyandry, which, as I have shown, stands on economical grounds, there is, strange to say, liberty for the women to choose yet another husband from a different family, a stranger. I have known cases where there were two—and, if my recollection does not deceive me, three—brothers, husbands to a woman, yet she took a fourth husband from outside.

The effect of all this in keeping down the population of the country is very great. Not only are fewer families founded than would be otherwise, but the families are smaller. In spite of the restricted area of cultivation, which it would not be easy to extend, though possible in a few cases, and in spite of there being no importation of grain—except of a small quantity of rice, which is an expensive luxury—the population of Ladākh, though fairly well filled up, is not redundant. Each person has his own position in connection with the land, and it would be impossible to take many away without throwing some of it out of cultivation. [311] [439]

It seems to me that such a balance is preserved in this way:—The system of polyandry probably would have the effect, if it were fully carried out, of absolutely lessening the population. When it does positively act in that way, when from that cause some holdings of land are, so to say, going begging, then more of simple marriages take place. An heiress of a few acres, say, gets a single husband whom she brings home; or an only son has a wife all to himself. Then the natural increase of population recommences, and the balance is redressed.

I could get no satisfactory answer to the inquiry I made of many—what becomes of the surplus of women which must, one would think, be caused by the custom? I did not learn that there were many old maids, and the number of nuns is less than the number of young men that have been drafted off to become monks. It is possible that polyandry alters the proportion of sexes in the children born—lessens the number of females; but this is hypothetical; I could not get statistics to throw light on the subject. [589]

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narrow ridges of granite, which lessen both in height and in width from far back, leaving between them space for alluvial deposits—sloping stony tracts—of the sort which I have called "confined fans." In colour this range contrasts with the opposite one, being of far less sombre tints; drab and yellow and light brown are the colours shown by this granite, of which sometimes the jointed rock itself, and sometimes the loosened material disintegrated from it, is shown; on both ranges the bare surface, untouched by vegetation, is exposed. At places the river itself, at places the flat alluvium, ends the stony ground and touches the last points of the spurs; these are in some cases crowned with the white buildings of a monastery; at Tagnā (or Staknā) are two isolated rocks, on the summit of one of which is built a monastery; between the two, in a rather narrow passage, flows the Indus.

The alluvial flat is of clayey soil, irrigated by watercourses from the Indus itself. South of Leh it is occupied by the village of Chushot, which, being near half a mile wide and some miles long, is the largest cultivated tract in Ladākh; it has over 200 houses, not concentrated into a village, but scattered over the plain singly, or in twos and threes, at intervals of a hundred yards or so. Chushot has not the picturesqueness of the villages which we have looked at lower down the valley; here fruit-trees do not grow, on account of the severity of the wind that blows along the length of the flat; still we see some poplars and small willows, and it is probable that plantations arranged in belts—one protecting the other—would flourish. The people of Chushot are Baltīs, Bhots, and Arghauns, the first predominating. As we go up the valley the cultivation of the alluvi flat ends, and the surface of it is of rounded pebbles. Farther on, a little above Tagnā, the river is bounded by high banks of alluvial matter, mostly belonging to fans that have been formed from the sides. Here, too, the fall begins to be greater, and the valley, narrowing, gets again the character it possessed lower down by Sāspūl and Khalsī. Besides the cultivation on the flat there are some villages in the tributary valleys on both sides, as Stok, Shān, Sabū, and Chimre; these are watered by the side-

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streams. In one of these tributary valleys is situated Himis monastery, the most noted one in Ladākh, which has 200 Lāmās. The monastery is a large mass of buildings placed just beneath a cliff at a bend of the narrow ravine, and in that way well sheltered. The wide window spaces and open galleries, and the decorations of drapery and waving flags make it look quite gay. Close by is a grove of large spreading poplars, which must be of the oldest trees in the country.

The last point I have been to in this section of the Indus Valley is Upshī, a small village at the mouth of the Gyā ravine. At that place we will count Central Ladākh to end. Above it is a narrow portion of the valley, which is called *Rong*, where the river flows between rocks, along which it is difficult to find a practicable path; still, there also villages occur in the side valleys, and a small population finds cultivable just enough of land to get a subsistence from.

## ROAD FROM LEH TO NUBRĀ.

In going from Central Ladākh to Nubrā (which lies along the banks of the Shāyok River and of a tributary to it) we must of necessity cross the Leh Range by one of two or three Passes. From Leh a direct road leads up along the stream whose waters irrigate the lands about that town. The Pass to make for is the Khardong Pass, which is 17,500 feet high; there is, therefore, an ascent to be made of 6000 feet. Not easily can this be done in one day; a half-way halt is almost always made, either at the last hamlet or farther up in the uninhabited part of the valley. The path is in places difficult for laden ponies; they are generally relieved of their loads and are replaced for the Pass by yāks. The way leads for some miles up the bottom of the valley, rising at an angle of 5°; then it continues in a branch valley of steeper gradient, till it reaches the watershed, which at this spot is a narrow rocky ridge.

A better idea of the form of the mountain range we are now going over than can be given in words will be got from the

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to the rest of Ladākh both by physical characters and by the close relationship in race, speech, religion, and character that exists between the people of the two countries. Till forty years ago, Zānskār was equally connected with Central Ladākh by political ties, being governed by a Raja, who was dependent on the Gyalpo at Leh; but now it belongs (as can be seen from the Political Map) not to the Ladākh Governorship, but to the district of Udampūr, in the Outer Hills, having been attached to this for, so to say, accidental reasons.

From all sides the approach to Zānskār, placed, as it is, in a maze of mountains, is of considerable difficulty. To the south-west of it the wide Snowy Range makes a barrier, to cross which must be a laborious and may be a dangerous business. From the north-west and the south-east, indeed, roads lead in from Surū and from Rupshu respectively, to traverse which is less difficult, but these lead over long uninhabited tracts. That way which first one would look to for communication with Leh — by the valley of the Zānskār River—is quite impassable, except when the winter's frost makes a road over the waters of the river. Instead of this, in summer time, the traveller from Leh has to make a long detour by Lāmāyūrū; he has to traverse fifteen stages, in which several Passes have to be surmounted, before Zānskār is reached.

By far the greater part of the area of Zānskār is occupied by the ridges and the ravines of mountains, either of the Snowy Watershed Range, or of the more complicated mass lying between that and Central Ladākh. The inhabited region is nearly all included in the valleys of two streams and of the river they make by their union. These two streams come, one from the north-west, the other from south-east; uniting, they together flow away to the north-east. At their junction is a wide open space, which is the central part of Zānskār; it includes in itself the most important places. This space is a triangle, with a base of seven miles, and a perpendicular of five; on the three sides it is bounded by bare mountains. But a very small proportion of this plain is cultivated; the most of it is an expanse of stony ground; the

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rivers flow through it somewhat below the general level; where water from side valleys has been brought on to the alluvial terraces and fans, there only is land under cultivation. On the north and east are bare brown mountains 6000 and 7000 feet above the valleys; their surface is in part of irregular cliffs, in part of slopes of loose stones, either simply weathered off and remaining in the same place, or else fallen and formed into taluses. Some of these mountains are wonderfully clear examples of aerial denudation; their naked sides are scarred and cut in lines which mark either temporary watercourses, or the path of falling snow and rock, while below lie the heaps and the outspread fans, which are the next stages of the débris in its seaward course. Great and striking objects as are these mountains, the range on the south-west shows over them a great preponderance of height; it has a deeply-cut serrated ridge, a line of sharp peaks rising well above the limit of perpetual snow.

In the open triangular space are many remains of former extended glaciers. In front of the mouth of the ravine, coming from the south-west, where is marked on the large map Sanī R., is an irregular moundy expanse made of stones, some angular, some rounded. Just south-west of Padam is another old moraine, which seems at one time to have reached across the stream a little above that place. The mound, also, on which Padam itself is built is due to a similar cause. But one cannot be sure how much of these old moraines were deposited by glaciers from the side ravines, or whether there was one large glacier filling all the long valley from the south-east. The position of Padam, the chief place, now but a village—but perhaps in former days when a Raja ruled there deserving of a higher name—is very curious. As said above, it is built on a mound of moraine matter. The mound is about 80 feet high; it is of loose, heaped-up blocks of gneiss, blocks which look as if they had stayed just as they fell from the glacier—the interstices vacant, the whole mass seeming as if it might give way. On the very summit of this heap was the palace of the Rajas, of which some walls are still standing; houses are built on the masses of stone all over the

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moraine;* it is composed of blocks, some angular, some half-rounded, and stones, many of them rounded, chiefly of granite and gneiss, but also of white crystalline limestone, sandstone, and shale; there are many very large blocks, one (of gneiss) measured 27 feet by 20 by 9 as seen above the ground, probably there was more than as much again beneath, and there were several others of about the same dimensions. The height of the mounds is often 250 feet above the low parts of the flat where two streams are flowing, and very likely this is the thickness of the moraine-stuff at those places, but the average thickness over the area may be less. This moraine is evidently the deposit of a glacier that occupied not only that valley which still, as the map shows, holds a glacier of a considerable size, but also those branches which extend to the north-east; it very probably rose over the low spur behind Lukung; this is about 250 feet high, and nearly to the summit, quite up to 200 feet above the valley, *on the south side of it*, I observed transported blocks of granite, and the glacier may have entered, and even crossed, the valley of the Pāngkong Lake.†

The last hamlet in this valley, the last in Ladākh in this direction, is Phobrang, some five miles above Lukung; it is 14,500 feet above the sea, there are one or two houses, occupied in summer for the sake of the cultivation of some naked barley on the alluvial flat, and deserted in winter for Lukung itself. A little higher up is Chagrā, 15,000 feet, a place of encampment, at some seasons, of a few families of Chāmpās. From Chagrā the road takes to an easterly branch of the valley and rises gradually, with hills on either side rounded in form and stony in surface. Thus we get to the Pass which is a little below the level of the hills on each side, though at some distance they rise nearly 2000 feet higher; they

* A good view of this is obtained from the spur behind the village of Lukung, over which a path goes, an alternative to the valley road.

† If the doubtful margin-marks 900 feet above the present lake (as described at p. 324 in a note) turn out to be real, I should be inclined to attribute the damming to such a great depth to this glacier, of whose existence and importance we have such good evidence.

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are of a dark-brown colour, in form for the most part rounded; their whole surface is covered with loose stones, either taluses or else rock disintegrated into angular blocks, remaining as yet unmoved. On the farther side comes a stony valley similar to the one we have just left; down this we continue for a day and a half's march, going sometimes across taluses, sometimes along alluvial terraces, over stony ground, gradually descending till we reach the Chângchenmo River itself. Here is a valley stretching straight east and west for far, the bottom of it a stony tract with the river flowing through it in many channels. In front of us, on the north side, is a bold line of mountains 5000 or 6000 feet above us, rocky in face, rising to a rugged ridge.

Below this spot where we first reach it (called both Pâmzâl and Tsolû) I have not followed the Chângchenmo Valley; I believe it in that part to be a rapid stream flowing between narrowing rocky mountains. Above, the valley is partly occupied by the wide gravelly river-bed and partly by alluvial terraces, all stony and bare; the hills that bound this vary much in height and steepness, some are smooth-sided and comparatively low, others both lofty and steep. A branch from the main valley leads to the north, up to the plateaus that will be described in the next chapter; it contains a stream of as great volume as the other. Gogrâ is a place where a rest-house has been built a few miles up that valley, soon above which it divides into Kugrâng, the westerly branch, and Chonglung, the north-easterly.

The places where the three requisites for travellers in these regions occur together, namely, water, grass, and fuel, are found several miles apart. One is Pâmzâl, already mentioned; here is some pasture, and, close by, a great supply of fuel in the bushy growth of myricaria (umbû) and of tamarisk on the alluvium. Then there is a stretch of over 12 miles before any more vegetation is met with. Then at Kyam, where some hot springs come out, there is a spread of grass extending some way up the valley, and there is brushwood also, and farther up, to the very head, there is grass to be found in places. Again, at Gogrâ, in the side valley,

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221 there is fuel and a little pasture. Thus scattered and scant is the
311 vegetation; excepting these far-between patches the whole surface
133x is a waste of rock or stone. Still the vegetation, scarce though it be, is enough to help on the traveller, and even to support the following of one or two families of tent-dwellers who pass a portion of the year in Chāngchenmo.